No. 749,188. PATENTED JAN. 12, 1904.

J. HANSEN.

SHIP'S WINDLASS.

APPLICATION FILED AUG. 18, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1.

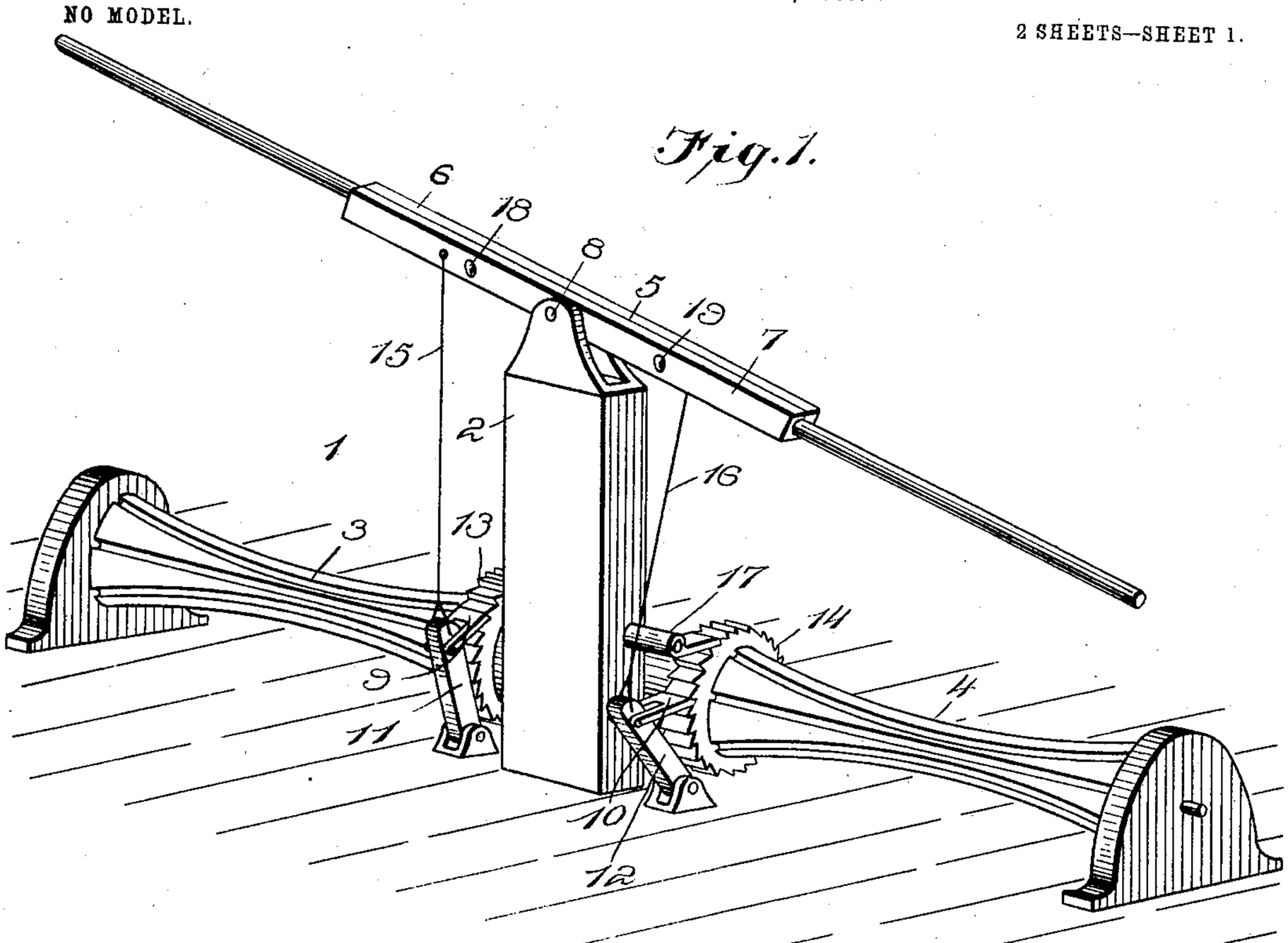
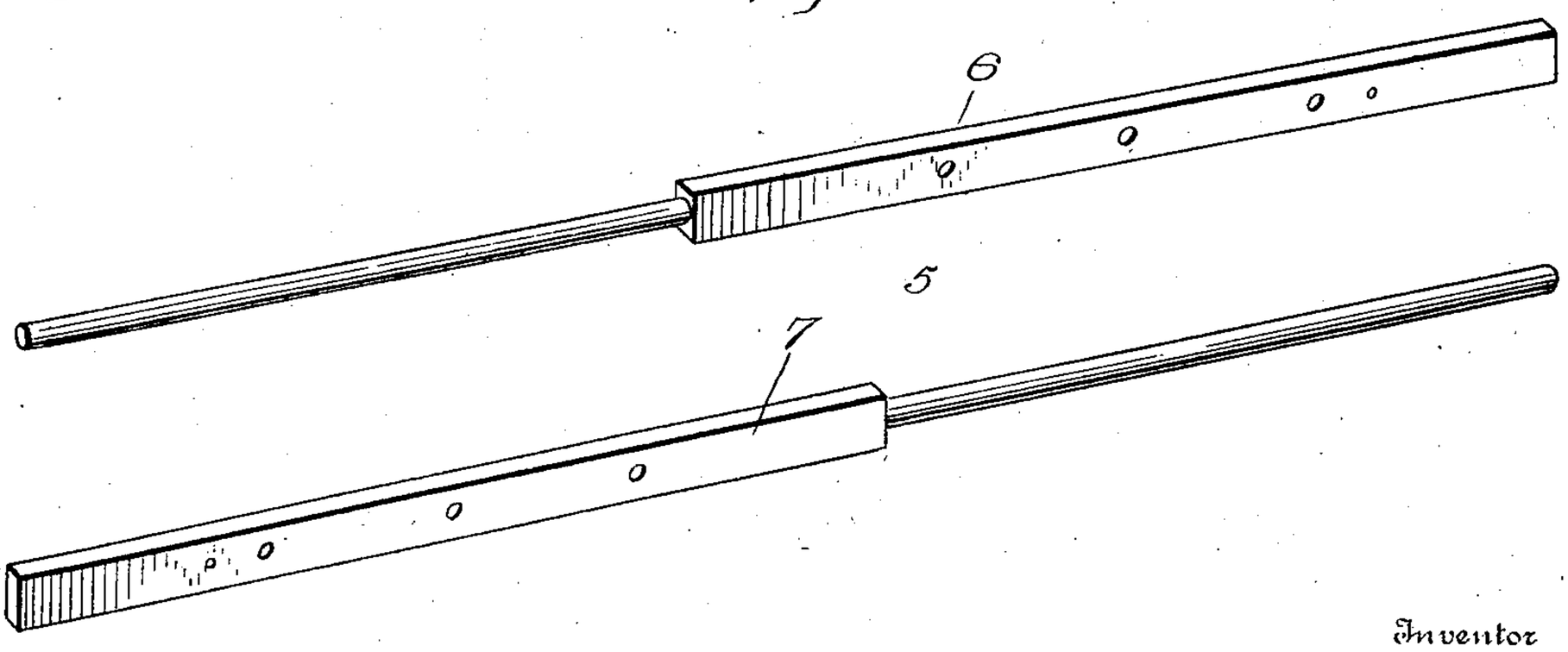


Fig. 2.



Witnesses
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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 3.

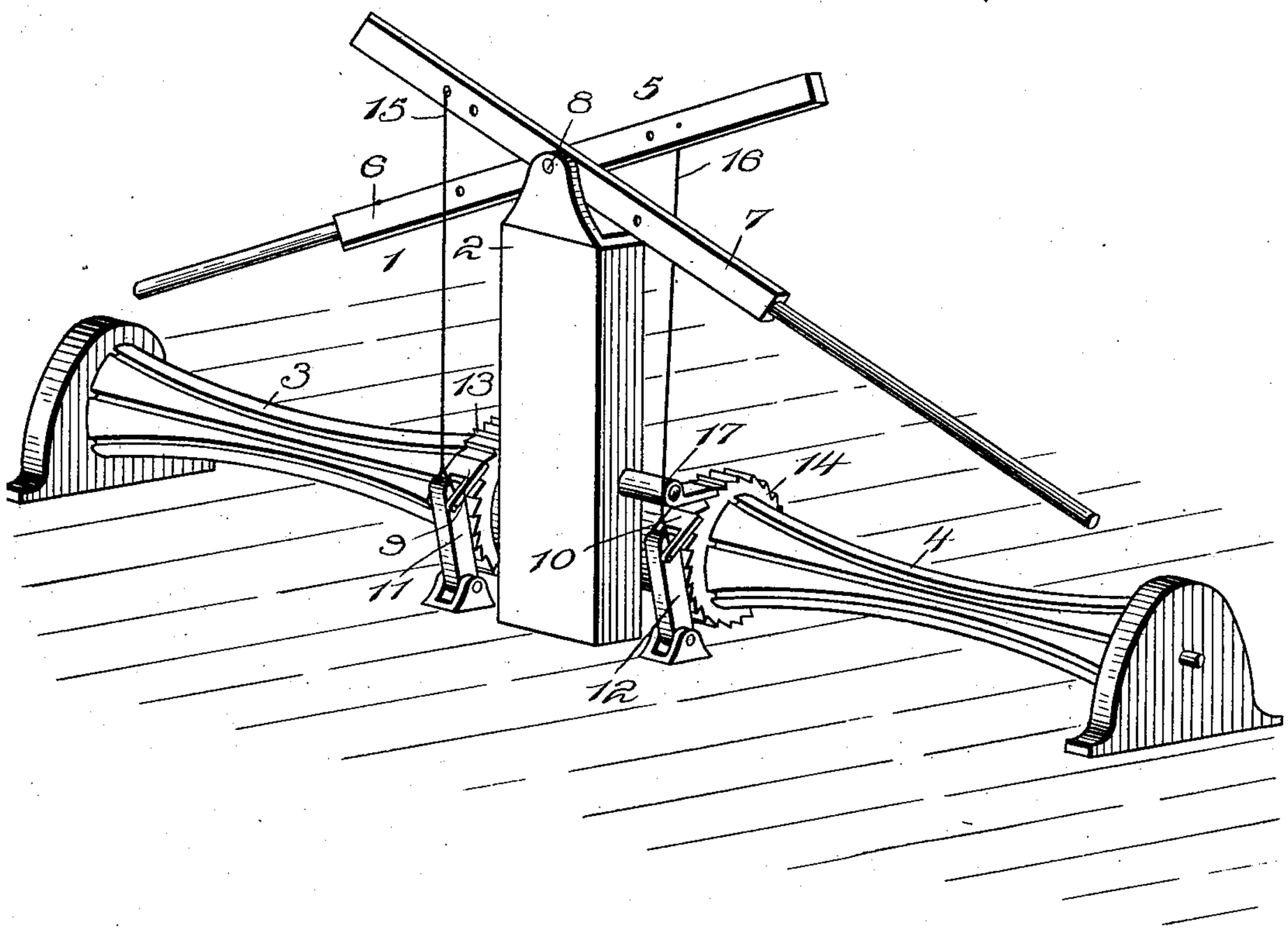
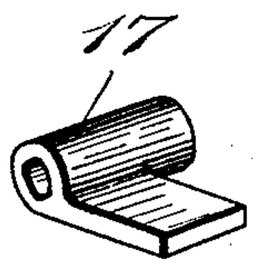


Fig. 4.



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No. 749,188. Patented January 12, 1904.

UNITED STATES PATENT OFFICE.

JOHN HANSEN, OF NORTHCOVE, WASHINGTON.

SHIP'S WINDLASS.

SPECIFICATION forming part of Letters Patent No. 749,188, dated January 12, 1904.

Application filed August 18, 1903. Serial No. 169,926. (No model.)

To all whom it may concern:

Be it known that I, JOHN HANSEN, a citizen of the United States, residing at Northcove, in the county of Pacific and State of Washington, have invented certain new and useful Improvements in Ships' Windlasses; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to windlasses, and has for its object to provide a device of this class which will be more powerful and easier of operation than those devices now in common use.

With this object in view my invention consists principally in the novel construction of the operating-lever.

My invention also consists in certain other novel features of construction, which will be first fully described and afterward specifically pointed out in the appended claims.

Referring to the accompanying drawings, Figure 1 is a perspective view of my invention, showing the operating-levers made rigid, as is the usual construction. Fig. 2 is a perspective view of the operating-levers. Fig. 3 is a perspective view of my invention, showing operating-levers disconnected; and Fig. 4 is a perspective view of pawl.

Like numerals of reference indicate the same parts throughout the several figures, in which—

1 indicates the windlass, of any desired construction, having the central standard 2 and winding-drums 3 and 4.

5 indicates my operating-lever, composed of the members 6 and 7, which are pivoted upon a single pin 8.

9 and 10 indicate the operating-pawls, which are pivoted to the links 11 and 12 and which engage the ratchets 13 and 14.

15 and 16 indicate the cables connecting said operating-pawls and operating-levers.

Secured at any suitable position is a pawl 17 to prevent the unwinding of the windlass.

Referring now to Fig. 1, it will be seen that the members 6 and 7 of the operating-lever are secured together by pins 18 and 19, which virtually forms one solid rigid lever, which is oscillated vertically, winding the drums at each stroke.

Where sufficient men are available and the windlass must be worked fast, my operating-lever is connected in this manner; but when sufficient men are not available to man the windlass in this manner and where time is not of paramount importance the lever members are disconnected, as shown in Fig. 3, making two independent operating-levers which are oscillated vertically, but which only revolve the drums on the downstroke. It will thus be seen that instantly my windlass can be changed from one form to the other, according to existing conditions, while I have not complicated the construction in any material way.

Having thus set forth my invention, I do not wish to be understood as limiting myself to the exact construction herein set forth, as various slight changes can be made therein which would fall within the limit and scope of my invention, and I consider myself clearly entitled to all such changes and modifications.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

1. In a windlass, the combination with the central standard, of the winding-drums and operating-pawls, an operating-lever composed of two independent members pivoted on the same pin and adapted to be operated independently, means for connecting said members together to form a single lever, and connecting means between said members and the said operating-pawls.

2. In a windlass, the combination of the drums and operating-pawls of two levers pivoted on a common pin and connected to said operating-pawls and adapted to be operated independently, and means for connecting said levers together to form a single lever, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN HANSEN.

Witnesses:

JOSEPH MCCARTHY,

WM. H. GUDGEL.